

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today
(1) was not written for publication in a law journal and
(2) is not binding precedent of the Board.

Paper No. 17

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte CRAIG OVERHAGE
AND
RICHARD AUSTIN

Appeal No. 96-1977
Application 08/348,389¹

ON BRIEF

Before HAIRSTON, BARRETT, and TORCZON, Administrative Patent Judges.

HAIRSTON, Administrative Patent Judge.

¹ Application for patent filed December 2, 1994. According to applicants, the application is a continuation of Application 08/135,099, filed October 12, 1993, now Patent No. 5,446,650.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 1 through 7, 30 and 31.

The disclosed invention relates to a method for obtaining and presenting digital data as being in either a first logic state or a second logic state, and to a method for communicating both analog and digital information to an instrument user.

Claims 1 and 30 are illustrative of the claimed invention, and they read as follows:

1. A method for obtaining and presenting digital data comprising the steps of:

performing multi-bit A/D conversion on an input signal at a plurality of sample times to obtain a series of multi-bit digital sample values with each sample value being associated with a corresponding sample time;

providing a logic level abstraction threshold as a reference; and

comparing sample values to the logic level abstraction threshold to establish whether each sample value is in a first logic state or a second logic state.

30. A method for communicating both analog and digital information to an instrument user comprising the steps of:

displaying an analog waveform representation of an input signal;

supplying the user with a cursor positionable along the time axis of the analog waveform display, the cursor having a current position; and

presenting a readout of a digital value of the analog signal

at the current position.

Claims 1 through 7, 30 and 31 stand rejected under 35 U.S.C. § 102(b) as being clearly anticipated by appellants' admitted prior art² in the Background of the Invention found on pages 1 through 9 of the specification.

Reference is made to the brief and the answer for the respective positions of the appellants and the examiner.

OPINION

Appellants argue (Brief, page 3) that "[n]one of the 13 U.S. patents discussed on pages 1-3 and the top of page 4 (to line 10) of the *Background of the Invention* portion of the specification include content corresponding to the second or third steps of claim 1, since they all refer to oscilloscopes having conventional oscilloscope displays. . . ." An additional argument (Brief, page 4) by appellants is that:

The next 13 U.S. patents that are discussed in the *Background of the Invention*, from page 4, line 11, to page 8, are all logic analyzer patents. None of these patents describe an instrument which meets the first element of Applicants' claim 1, i.e., "performing multi-bit A/D conversion on an input signal at a plurality of times to obtain a series of multi-bit

² The examiner includes a listing of prior art of record (Answer, page 2), but states that "only appellant's [sic, appellants'] admissions concerning the following prior [art] has been used in rejecting the claims an [sic, and] not the actual documents."

digital sample values." Logic analyzers of the prior art all make threshold comparisons directly from the input analog signal, and do not perform multi-bit A/D conversion to obtain a series of multi-bit digital sample values before making such a comparison.

We agree with appellants that two different devices (i.e., oscilloscopes and logic analyzers) are described on pages 1 through 8 of the Background of the Invention, and that neither device is capable of performing all of the steps set forth in claim 1. The last page of the Background of the Invention indicates that "[s]everal efforts have been made to combine some of the features of logic analyzers with those of oscilloscopes." Several broad features of combined devices are described on the last page of the Background of the Invention, but they do not perform the steps set forth in claim 1. In the absence of evidence that states otherwise, we have no reason to disagree with appellants' argument (Brief, page 4) that "[i]n these instruments there is a separation between the logic analyzer part and the oscilloscope part,"

With respect to claim 30, we agree with appellants' argument (Brief, page 5) that "[t]he admitted prior art does not show the combination of 'displaying an analog waveform representation of an input signal', 'supplying the user with a cursor positionable along the time axis of the analog waveform display, the cursor

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having a current position', and 'presenting a readout of a digital value of the analog signal at the current position.'"

In view of the foregoing, the 35 U.S.C. § 102(b) rejection of claims 1 and 30 and the claims that depend therefrom is reversed.

DECISION

The decision of the examiner rejecting claims 1 through 7, 30 and 31 under 35 U.S.C. § 102(b) is reversed.

REVERSED

KENNETH W. HAIRSTON)	
Administrative Patent Judge)	
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)	
)	BOARD OF PATENT
LEE E. BARRETT)	APPEALS AND
Administrative Patent Judge)	INTERFERENCES
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RICHARD TORCZON)	
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